

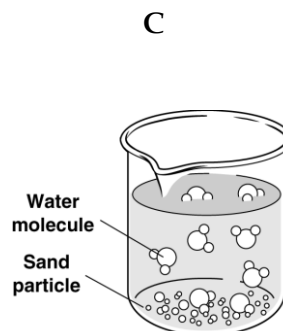
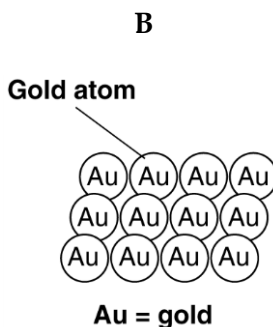
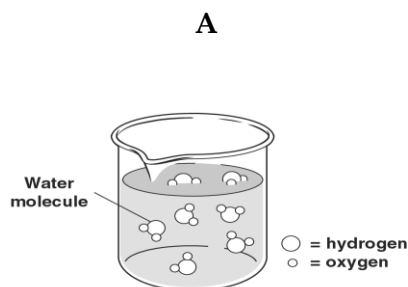
## What are three types of matter?

Decide which type or types of matter—*element*, *compound*, or *mixture*—are being described. Write the correct terms in the spaces provided.

- |       |   |
|-------|---|
| _____ | 1. A substance made up of one type of atom                          |
| _____ | 2. A chemical combination of two or more different elements         |
| _____ | 3. Cannot be physically separated                                   |
| _____ | 4. Elements are chemically combined in specific amounts             |
| _____ | 5. A physical combination of two or more substances                 |
| _____ | 6. Kinds of matter are present in any amounts                       |
| _____ | 7. Has different properties than the original elements              |
| _____ | 8. Cannot be chemically broken down into a simpler substance        |
| _____ | 9. Can be physically separated                                      |
| _____ | 10. The substances that are combined keep their original properties |

### Skill Challenge

Study the diagrams below. Circle the letter of the diagram that is described by each phrase. Some phrases may describe more than one diagram.



- |                     |          |          |          |
|---------------------|----------|----------|----------|
| 1. an element       | <b>A</b> | <b>B</b> | <b>C</b> |
| 2. a compound       | <b>A</b> | <b>B</b> | <b>C</b> |
| 3. a mixture        | <b>A</b> | <b>B</b> | <b>C</b> |
| 4. a pure substance | <b>A</b> | <b>B</b> | <b>C</b> |

# Atoms, Elements, Compounds and Mixtures

**Directions:** *Unscramble the terms in italics to complete the sentences below. Write the terms on the lines.*

- \_\_\_\_\_ 1. Two or more substances that are completely mixed make up a *nooehgsmoue* mixture.
- \_\_\_\_\_ 2. An atomic particle **NOT** in the nucleus is a(n) *roltecen*.
- \_\_\_\_\_ 3. A(n) *meeteln* is a material that contains only one kind of atom.
- \_\_\_\_\_ 4. A melting ice cube is an example of a(n) *ycplsiha* change.
- \_\_\_\_\_ 5. A(n) *dunomcop* is a substance made of two or more different elements.
- \_\_\_\_\_ 6. An atomic particle with no electrical charge is a(n) *ennrout*.
- \_\_\_\_\_ 7. Two or more substances form a *tumirex* when they come together without forming a new substance.
- \_\_\_\_\_ 8. The number of protons in the *sculune* of an atom is the atom's atomic number.
- \_\_\_\_\_ 9. A(n) *aelhimcc* change produces a new substance.
- \_\_\_\_\_ 10. Anything that takes up space and has mass is *tramte*.
- \_\_\_\_\_ 11. A(n) *unotsloi* is a homogenous mixture formed when one substance dissolves in another.
- \_\_\_\_\_ 12. The number of protons plus the number of neutrons is the *sams* number of an element.
- \_\_\_\_\_ 13. A mixture made of separate substances is called a(n) *eeeshrutooneg* mixture.
- \_\_\_\_\_ 14. An element's *coatim* number tells you the number of protons in its nucleus.
- \_\_\_\_\_ 15. A(n) *ootrpn* is an atomic particle with a positive charge.